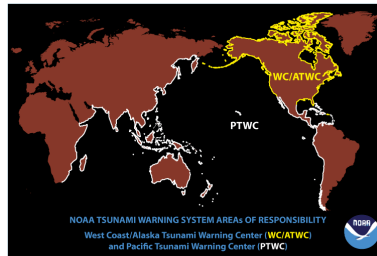


User's Guide for the Tsunami Warning System in the West Coast/Alaska Tsunami Warning Center Area-of-Responsibility



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**National Oceanic and Atmospheric Administration
National Weather Service**

Section 1: Operations Plan Objective and Scope

1.1 Plan Objective

The purpose of the Operations Plan for the West Coast/Alaska Tsunami Warning Center (WCATWC) is to provide warning recipients in the area-of-responsibility (AOR = Canadian coastal regions, Puerto Rico and the Virgin Islands, and the ocean coasts of all U.S. states except Hawaii) a document which summarizes the tsunami warning system, tsunami warning and informational messages, and message dissemination throughout the AOR. Subjects in this plan include:

- Tsunami Warning Center Operations
- Procedures
- Messages
- Dissemination routes
- Primary contacts

1.2 Plan Scope

The scope of this plan is limited to provide an overview of the tsunami warning system within the WCATWC AOR, and its procedures, products, dissemination paths, and primary message recipients. For further information on Administrative details of the National Ocean and Atmospheric Administration's (NOAA) tsunami warning system, please refer to the appropriate National Weather Service directives and instructions:

- Tsunami Warning Services - <http://www.nws.noaa.gov/directives/sym/pd01007curr.pdf>
- Tsunami Warning Center Operations - <http://www.nws.noaa.gov/directives/sym/pd01007001curr.pdf>

For further information on the Tsunami Warning System in the Pacific, please refer to the Pacific Tsunami Warning System User's Guide maintained by the UNESCO-IOC (http://itic.ioc-unesco.org/index.php?option=com_content&view=category&layout=blog&id=1303&Itemid=1303&lang=en).

Section 2: The West Coast/Alaska Tsunami Warning Center

2.1 NOAA Tsunami Warning Center Mission

NOAA's tsunami mission is to provide reliable tsunami detection, forecasts, and warnings and to promote community resilience.

The primary operational warning system objectives for carrying out this mission are to rapidly locate, size, and otherwise characterize major earthquakes, determine their tsunamigenic potential, predict tsunami arrival times, predict coastal impact when possible, and disseminate appropriate warning and informational products based on this information.

NOAA operates two tsunami warning centers in the United States: the West Coast/Alaska Tsunami Warning Center and the Pacific Tsunami Warning Center. The West Coast/Alaska Tsunami Warning Center area-of-responsibility (AOR) consists of Canadian coastal regions, Puerto Rico and the Virgin Islands, and the ocean coasts of all U.S. States except Hawaii. The Pacific Tsunami Warning Center AOR consists of Hawaii, other U.S. interests in the Pacific Basin, countries participating in the Tsunami Warning System in the Pacific, and Indian Ocean and other Caribbean Sea countries.

2.2 Overview of West Coast/Alaska Tsunami Warning Center Operations

Background

The West Coast/Alaska Tsunami Warning Center (WC/ATWC) is operated by the Alaska Region of the National Weather Service and is located in Palmer, Alaska. The center collaborates with the Pacific Tsunami Warning Center to provide tsunami warning service, and mutual backup, to United States coastal regions and many other countries throughout the world.



To accomplish its mission of providing accurate and timely tsunami bulletins to its AOR, the center detects, locates, sizes, and analyzes earthquakes throughout the world. Earthquakes that activate the center's alarm system initiate an earthquake and tsunami investigation which includes the following four basic steps: automatic locating and characterizing the earthquake; earthquake analysis and review; sea level data analysis and tsunami forecasting; and disseminating information to the appropriate emergency management officials.

In addition to its basic functions, the center conducts a community preparedness program intended to increase public awareness of the tsunami hazard and improve tsunami planning at

the community level. The center also actively pursues developmental projects which enhance tsunami warning operations.



The WC/ATWC operates 24 hours every day with two watchstanders on duty.

Observational Networks

Tsunami bulletins are initially issued based solely on seismic data. Approximately 450 channels of seismic data are recorded at the center. Seismic networks which provide the data are operated and funded by many different agencies, including the United States Geological Survey (USGS), the Global Seismic Network, NOAA, various universities throughout the country, and foreign governments. Access to data is

provided through dedicated circuits, private satellite networks, and the internet.

Once a significant event has occurred, the nearest tide gages and deep ocean tsunami detectors (DART) are monitored to confirm the existence or nonexistence of a tsunami, and its degree of severity. If a tsunami has been generated, the sea level data is critical for use in calibrating forecast models. The center has access to approximately 500 tide sites and 44 DARTs. Many of these sites are maintained by NOAA's National Ocean Survey (NOS). In addition to the NOS sites, other international agencies provide sea level information to the Center. The WC/ATWC also operates several gages in Alaska.

Procedures

The warning center's initial response must be issued very quickly and is based on seismic analysis and well-defined, preset criteria given in Section 3. Whether a Tsunami Warning, Watch, Advisory, or Information Statement is issued is based on these pre-set criteria and the initial seismic analysis. Following the first message, the tsunami is analyzed using observed sea level data, forecast models, historic data, and further seismic processing. Based on this analysis, supplemental messages are issued if a Warning, Watch, or Advisory was originally issued. Areas with forecasts 1m or greater in zero-to-peak amplitude are generally put in a tsunami Warning; those with forecasts 0.3m to 1m in an Advisory, and for those less than 0.3m Warning, Watch, and/or Advisory are cancelled. Historical information has shown that tsunamis can cause damage due to strong currents when amplitudes reach 0.5m or greater.

Products

Primary recipients of tsunami messages (discussed further in Section 4 with examples in Section 7) are coastal state/province departments of emergency services, the Federal Emergency Management Agency, National Weather Service offices, Canada's Atlantic Storm

Prediction Center, the U.S. Coast Guard, and the Dept. of Defense. While these agencies are considered primary, the bulletins are available through a variety of means, discussed further in Section 5, to local emergency managers and the general public. WC/ATWC primary contacts are listed in Section 6.

The Center's goal is to issue tsunami warnings within five minutes of an earthquake. Since the Center has implemented 24x7 on-site operations, average response time has dropped to less than four minutes for events with the AOR.

Community Preparedness



The ability of any warning system to successfully save lives and reduce property damage depends upon getting the information to the public and getting them to respond to the emergency. To help attain this goal, the National Weather Service has implemented a program known as TsunamiReady which sets forth guidelines for communities to improve tsunami preparedness. This program was started in 2000 and was based on the National Weather Service StormReady program. The TsunamiReady program's purpose is to recognize communities which have taken the steps necessary to be as prepared as

possible for a tsunami. This requires the communities to follow a set of guidelines. The guidelines show that the community can receive and disseminate warnings, have a tsunami hazard plan in place, have posted evacuation routes, designated shelters, and have worked to enhance tsunami awareness throughout their community. As of October, 2011, 93 communities and counties along the U.S. state and territory coasts are recognized as TsunamiReady. Center personnel actively work with local emergency officials to attain the TsunamiReady recognition.

Section 3: Procedures

Summary

WC/ATWC procedures are organized by the source's geographic region and magnitude. The basic procedures are summarized in the bar chart in Figure 1. The actions shown in Figure 1 indicate the first bulletin (and in many cases the only bulletin) to be issued. Follow up actions are described by using the Flow Charts located in the Center's Operation manual.

Supplemental warning, watch or advisory bulletins for events within the AOR are issued every 30 minutes in the early parts of an event, and less often in the latter parts of an event.

Occasionally a follow-up message may be necessary for a Tsunami Information Statement (e.g., when a small tsunami was recorded or where the statement must be upgraded to a warning).

This would be considered Tsunami Information Statement #2 or, if upgraded to a warning, Tsunami Warning #2.

Breakpoints

Warning, Watch, and Advisory extent are set based on distance from epicenter, tsunami travel time, or pre-computed threat estimates, and are listed in the messages as extending from X to Y (except for special cases like the Bering Sea or Gulf of Saint Lawrence). Atlantic AOR breakpoints are the breakpoints between NWS Weather Forecast Office AORs. Estimated tsunami arrival times are provided in WEXX20 W/W/A messages for up to twenty cities in the US, four in PR/VI, and six in Canada. The breakpoints are listed below.

Brownsville, TX	Jupiter Inlet, FL	Stonington, ME
Baffin Bay, TX	Flagler Beach, FL	US/Canada border
Port O'Connor, TX	Altamaha Sound, GA	Charlesville, NS
High Island, TX	South Santee River, SC	Chezzetcook Inlet, NS
Morgan City, LA	Surf City, NC	Meat Cove, NS
MS/AL Border	Duck, NC	Cape Ray, NF
Destin, FL	New Point Comfort VA	La Manche, NF
Suwannee River, FL	Cape Henlopen, DE	Boat Harbour, NF
Bonita Beach, FL	Sandy Hook, NJ	Cape Chidley, NL
Flamingo, FL	Watch Hill, RI	
Ocean Reef, FL	Merrimack River, MA	

Estimated tsunami arrival times are provided in the Pacific WEPA41 W/W/A messages for up to twenty-four cities along the Pacific U.S. and Canadian coasts. As of August 2010, Pacific breakpoints match the break points used in NWS public (onshore) zones. The Pacific AOR breakpoints are:

Attu, AK	Salisbury Sound, AK	Horse Mountain, CA
Amchitka Pass, AK	Cape Decision, AK	Gualala Point, CA
Nikolski, AK	BC/Alaska Border	Davenport, CA
Unimak Pass, AK	N Tip Vancouver Is., BC	Ragged Point, CA
Chignik Bay, AK	Washington-BC Border	Point Conception, CA

Kennedy Entrance, AK	Washington-OR Border	Rincon Point, CA
Hinchinbrook Ent., AK	Cascade Head, OR	Alamitos Bay, CA
Cape Suckling, AK	Douglas/Lane Cty. Line	California-Mexico Border
Cape Fairweather, AK	Oregon-California Border	

WCATWC-Pacific						WCATWC-Atlantic							PTWC Backup								
Area	AK, BC, WA, OR, CA ^a	Bering Sea Deep ^a	Arctic O., and Bering Shallow	Not in Pacific AOR ^a	Indian Ocean Basin	East Coast US & Canada ^a	East Coast Inland <400 Mile	Gulf Mex Gulf St. L ^a	Puerto Rico/VI ^a	Not AOR Western Caribbean ^a	Not AOR Eastern Caribbean ^a	Not AOR Atlantic	Hawaii ^a	Pacific ^a	WCATWC	All ^a	Indian Ocean	Indian Ocean	Caribbean Sea	Atlantic Ocean	Caribbean/Atlantic
Mag						Mag							Mag								
4						4							4								
5						5							5								
6	TIS*** SEAK71 or SEUS71	TIS*** SEAK71	TIS*** SEAK71			6							6								
6.4						6.4							6.4								
6.5	TIS WEPA43 and WEAK53	TIS WEPA43 and WEAK53	TIS WEPA43 and WEAK53	TIS WEPA43 and WEAK53	TIS WEPA43 and WEAK53 (if PTWC issues msg.)	6.5							6.5								
7	Warning * 250km WEPA41 and WEAK51	Warning * Pribilof/ Aleutian Is. WEPA41 and WEAK51	Advisory**	TIS WEPA43/S3 or Watch/Adv Warning WEPA41 and WEAK51		7							7								
7.1						7.1							7.1								
7.5						7.5							7.5								
7.6	Warn/Adv* 500/500km WEPA41/S1					7.6							7.6								
7.8						7.8							7.8								
7.9	Warning 3WW WEPA41/ WEAK51					7.9							7.9								
10						10							10								

*** Based on magnitude and distance from the coast.

No TIS for Alaska if less than magnitude 5 and West of 155W

3W/3W => warning for area impacted within 3 hours and watch for area 3 to 6 hours away

3W/W => warning for area impacted within 3 hours and watch for rest of AOR

TIS = Tsunami Information Statement

WMO product IDs listed under message type

** For Arctic; Advisory if south of 75N and west of 138W; else TIS

^a if deeper than 100km and <7.9, use TIS

* No Watch

** countries within 1000 km of epicenter

* if North of 35 degrees or between 3 and 6 hours, Hawaii in Watch

PTWC issues two messages for most Pacific events (Hawaii and international)

PTWC issues two messages for most Pacific events (Hawaii and international)

^a Top shows source zone and line below is where the product is sent

Figure 1-Procedures Chart

Section 4: Messages

4.1 Message Definitions

Products issued by the WCATWC are warning, watch, advisory, and information statement. Each has a distinct meaning relating to local emergency response. In summary:

Warning	->	Inundating wave possible	->	Full evacuation suggested
Watch	->	Danger level not yet known	->	Stay alert for more info
Advisory	->	Strong currents likely	->	Stay away from the shore
Information	->	Minor waves at most	->	No action suggested

Based on seismic data analysis or forecasted amplitude (dependent on whether the center has obtained sea level data), WCATWC will issue the appropriate product. Warnings and Advisories suggest that action be taken. Watches are issued to provide an early alert for areas that are distant from the wave front, but may have danger. Once the danger level is determined, the watch is upgraded to a warning or advisory, or canceled. The full definition of each message is given below:

Tsunami Warning - A tsunami warning is issued when a tsunami with the potential to generate widespread inundation is imminent, expected, or occurring. Warnings alert the public that dangerous coastal flooding accompanied by powerful currents is possible and may continue for several hours after initial arrival. Warnings alert emergency management officials to take action for the entire tsunami hazard zone. Appropriate actions to be taken by local officials may include the evacuation of low-lying coastal areas, and the repositioning of ships to deep waters when there is time to safely do so. Warnings may be updated, adjusted geographically, downgraded, or canceled. To provide the earliest possible alert, initial warnings are normally based only on seismic information.

Tsunami Advisory - A tsunami advisory is issued when a tsunami with the potential to generate strong currents or waves dangerous to those in or very near the water is imminent, expected, or occurring. The threat may continue for several hours after initial arrival, but significant inundation is not expected for areas under an advisory. Appropriate actions to be taken by local officials may include closing beaches, evacuating harbors and marinas, and the repositioning of ships to deep waters when there is time to safely do so. Advisories are normally updated to continue the advisory, expand/contract affected areas, upgrade to a warning, or cancel the advisory.

Tsunami Watch - A tsunami watch is issued to alert emergency management officials and the public of an event which may later impact the watch area. The watch area may be upgraded to a warning or advisory - or canceled - based on updated information and analysis. Therefore, emergency management officials and the public should prepare to take action. Watches are normally issued based on seismic information without confirmation that a destructive tsunami is underway.

Tsunami Information Statement - A tsunami information statement is issued to inform emergency management officials and the public that an earthquake has occurred, or that a tsunami warning, watch or advisory has been issued for another section of the ocean. In most

cases, information statements are issued to indicate there is no threat of a destructive tsunami and to prevent unnecessary evacuations as the earthquake may have been felt in coastal areas. An information statement may, in appropriate situations, caution about the possibility of destructive local tsunamis. Information statements may be re-issued with additional information, though normally these messages are not updated. However, a watch, advisory or warning may be issued for the area, if necessary, after analysis and/or updated information becomes available.

The Center also issues “public” products in addition to the standard NWS format tsunami products. These were designed to include wording easier for the layman to understand. Tabulated tsunami travel times and hypocenter information were removed and replaced with information written in a more readable format. Tsunami warnings, watches, advisories, and information statements now have corresponding public products. The public products do not include NWS universal generic codes (UGC) or VTEC codes while the standard watch/warning messages contain segmented UGCs.

The WC/ATWC also issues monthly communication tests over its primary dissemination paths. The Tsunami Warning Message product code (see section 4.2) is used on the test messages. Each month a Pacific AOR and an Atlantic AOR test are conducted. As tsunamis are uncommon events, this testing is critical to ensure robust message dissemination.

4.2 Message Identifiers

The WCATWC tsunami messages are National Weather Service products. NWS products are described by both a World Meteorological Organization (WMO) Header and an AWIPS ID. The following table describes the products. The standard warning, watch, and advisory products (WEPA41 and WEXX20) are segmented at the end of the bulletin by Universal Generic Codes and contain NWS VTEC codes. The public products (WEAK51, WEAK53, WEXX30, and WEXX32) are in an easy-to-read format intended for the general public and contain action statements and information highlighting the dangers of tsunamis.

WMO Header	NWS AWIPS ID	Explanation
WEPA41 PAAQ	TSUWCA	Tsunami Warnings, Watches, and Advisories AK, BC, and US West Coast
WEPA43 PAAQ	TIBWCA	Tsunami Information Statements AK, BC, and US West Coast
WEAK51 PAAQ	TSUAK1	“Public” Tsunami Warnings, Watches, and Advisories AK, BC, and US West Coast
WEAK53 PAAQ	TIBAK1	“Public” Tsunami Information Statements AK, BC, and US West Coast
SEAK71 PAAQ	EQIAKX	Tsunami Seismic Information Statements Alaska

SEUS71 PAAQ	EQIWOC	Tsunami Seismic Information Statements BC and US West Coast
WEXX20 PAAQ	TSUAT1	Tsunami Warnings, Watches, and Advisories PR/VI, US East, Gulf, and Canadian Maritime Provinces
WEXX22 PAAQ	TIBAT1	Information Statements PR/VI, US East, Gulf, and Canadian Maritime Provinces
WEXX30 PAAQ	TSUATE	“Public” Tsunami Warnings, Watches, and Advisories PR/VI, US East, Gulf, and Canadian Maritime Provinces
WEXX32 PAAQ	TIBATE	“Public” Tsunami Information Statements PR/VI, US East, Gulf, and Canadian Maritime Provinces
SEXX60 PAAQ	EQIAT1	Tsunami Seismic Information Statements PR/VI, US East, Gulf, and Canadian Maritime Provinces

PTWC products can be generated at WC/ATWC in case backup is necessary. Web-based format products are created and issued by the WC/ATWC to its web site. The web-based products are written in an html format with embedded links to related information and are similar in format to the public products.

Section 5: Message Dissemination Routes

5.1 Overview of Product Dissemination Paths

Summary of Message Dissemination Methods at the West Coast/Alaska Tsunami Warning Center

Service	Owner or Operating Agency	Primary user audience
* NMCLine	NWS	NWS Offices via AWIPS, NWS Telecommunications Gateway to EMWIN, Family of Services, Global telecommunications system, and other NWS communication systems.
* NOAA Weather Wire	NWS	National Weather Service forecast subscribers and U.S./Canada state/province emergency management agencies
NAWAS	FEMA	Emergency management agencies nationwide.
AKWAS	Alaska DHS&EM/FEMA	Emergency management offices in State of Alaska
Hurricane Hotline	NWS	East/Gulf coast WFOs
VHF radio	Alaska DHS&EM	Alaska DHS&EM, AK State Troopers, Palmer Police
Satellite Phone Backup	WCATWC & PTWC	Tsunami Warning Centers (emergency backup communications)
*EIDS	USGS	Emergency management officials.
*INTERNET (web site, email, RSS, and cell phone text messaging)	Public	International and domestic government agencies, academic institutions and the public in general
Telephone	Public	A Primary and Secondary phone list is maintained

Text messages are automatically composed by the message generation software. The wording of the text is dependant on the size and location of the earthquake. An asterisk

(*) in the table above indicates messages are transmitted on these systems simultaneously from the Operations console at the Center. Figure 2 shows main communications paths and recipients.

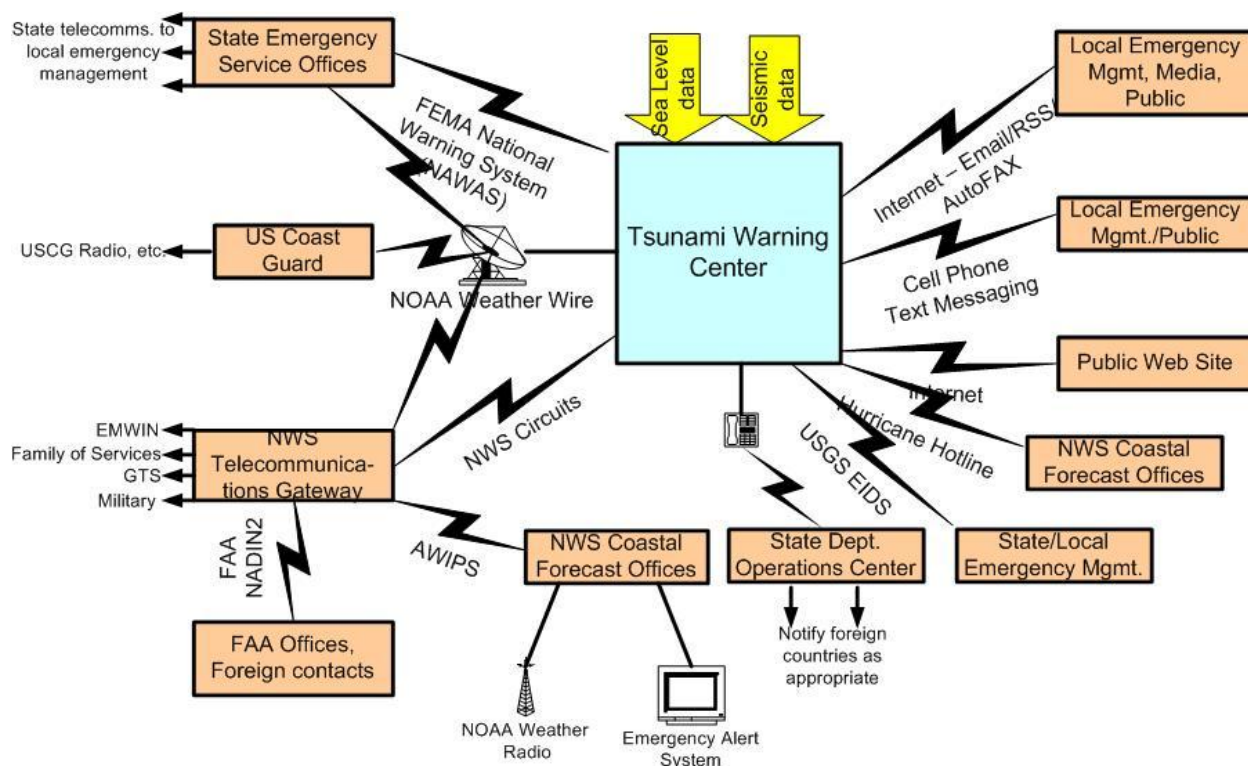


Figure 2 - WCATWC message communications

NADIN2 - The FAA NADIN2 **A**eronautical **F**ixed **T**elecommunications **N**etwork is a world-wide communications system for the exchange of messages and/or digital data between stations primarily for the safety of air navigation and other air services. Since most flight service facilities must be cognizant of current aviation weather forecasts, many weather forecast offices are provided with AFTN terminals. Messages over this media must be specifically addressed to recipients. Collective addresses are used to transmit to the Alaska Weather Service Offices, Weather Forecast Offices, Flight Service Stations, and Federal Aviation Administration regional Operation Centers nationwide. **WCATWC feeds messages into NADIN2 through the NWSTG.**

NMCLine – This is the circuit between the NWS Telecommunication Gateway in Silver Spring MD and the Alaska Regional Headquarters (ARH) in Anchorage AK. The WC/ATWC transmits and receives messages to and from this line via a socket connection to a server at the ARH. ARH then sends tsunami products to the NWS AWIPS system and provides a secondary route into the NOAA Weather Wire system at the Anchorage WFO. This routing also provides tsunami messages to the NWS telecommunications gateway, and from there to a multitude of NWS communication services such as the Emergency Managers Weather Information Network (EMWIN), Family of Services, and the Global telecommunications system.

NOAA Weather Wire - The NOAA Weather Wire is a satellite broadcast service maintained by the NWS to disseminate weather products domestically. Both the WCATWC and PTWC have uplink and downlink capability on the NWW system. Users of the NWW system consist of Weather Service Offices, state and provincial emergency management agencies, and the U.S. Coast Guard. Receiver sites can program their selector box to receive any number of selected NWS products (or messages).

NAWAS - The **NA**ational **WA**arning **S**ystem is a nationwide dedicated voice telephone system connecting selected defense, National Weather Service, emergency management, and Coast Guard agencies. The circuit is supported by the Federal Emergency Management Agency (FEMA). Control over transmissions on the circuit is maintained by the FEMA Operations Center or the FEMA Alternate Operations Center.

AKWAS - The **AlasKa WA**arning **S**ystem is a statewide dedicated voice telephone system connecting Alaska Division of Homeland Security and Emergency Management (DHS&EM), National Guard, Law Enforcement and Weather Service Offices. The circuit is supported by the FEMA and the Alaska DHS&EM. Control over transmissions on the circuit is maintained by the State Warning Point at Fort Richardson, Alaska.

Hurricane Hotline – The Hurricane Hotline is operated by the National Weather Service and connects East/Gulf coast Weather Forecast Offices through a dedicated circuit similar to the NAWAS.

VHF Radio – Broadcasting on 155.295 (Emergency Area Command Frequency) and 155.250 MHz this system provides emergency voice communications to the Alaska DHS&EM, Alaska State Troopers, and Palmer Police. Messages are only transmitted by this means in absence of primary communications.

Satellite Phone – This phone system is for emergency communications between the two tsunami warning centers and other primary message recipients. It is intended for use when other normal communications systems have failed.

EIDS – Earthquake Information Distribution System - An earthquake information dissemination tool operated by the United States Geological Survey. The internet is used to transmit earthquake information to USGS servers where it is disseminated to various web sites and agencies.

Internet –Group email lists (for emergency managers) are maintained. Watch/Warning/Advisory messages and Tsunami Information Statements (WExxxx products) are sent to the full set, whereas messages regarding lesser events (SExxxx) are sent to a smaller subset. Shortened cell phone pager messages are also transmitted via internet to emergency managers. A public web site is maintained at <http://wcatwc.arh.noaa.gov/> where current event messages and maps are posted. The web site also provides a large amount of educational, safety, and scientific information. A public email and cell phone text messaging service is also available through the WCATWC web site, as well as RSS feeds and XML/CAP format products.

Telephone – Primary and Secondary telephone lists are maintained. A short call down list is notified after events.

5.2 Overview of Product Retrieval Methods

WC/ATWC products are issued and can be retrieved by several different methods. Many communities have developed local methods for disseminating the message; such as, sirens, automatic phone calls, local CB radio, AHAB Radio, etc. Contact your local emergency management for dissemination methods within your community.

National Weather Service Systems

- NOAA Weather Wire Service
- NOAA Weather Radio (NWR)
- EMWIN®
- National Weather Service Forecast Offices
- Email/cell phone text messaging
- WCATWC Web Page
- RSS feed

State and Provincial Dissemination Systems

Federal Communications Commission

- Emergency Alert System

United States Coast Guard

- US Coast Guard Radio

Section 6: Primary Contact List

State	Agency	Primary Comms	Street	City	Zip
AK	USAF - Elmendorf Command Center	Email/Phone	Q Street	Elmendorf AFB	99506-2830
	SWP - Alaska	NWW/NAWAS	P.O. Box 5750	Ft. Richardson	99505
	WFO - Anchorage	AWIPS	6930 Sand Lake Rd	Anchorage	99502-1845
	AK State Troopers, HQ - Fairbanks	AKWAS	1979 Peger Rd	Fairbanks	99709-5257
	NWS - AK Regional HQ	Phone	222 W. 7th Ave., Rm 23	Anchorage	99513-7575
	WFO - Juneau, AK	AWIPS	8500 Mendenhall Loop Rd.	Juneau	99801
	WFO - Fairbanks, AK	AWIPS	P.O. Box 757345	Fairbanks	99775-7345
	USCG - 17th District	NWW/NAWAS	P.O. Box 25517	Juneau	99802-5517
AL	WFO - Mobile	AWIPS	8400 Airport Blvd., Bldg 11	Mobile	36608
	SWP - Alabama	NWW/NAWAS	P.O. Drawer 2160	Clanton	35046-2160
BC	MARPAC - Maritime Forces Pacific Operations Center	NAWAS	Bldg 77, Box 17000, Stn Forces	Victoria	V9A 7N2
	PEP - Emergency Coordination Center	NWW/NAWAS	P.O. Box 9201, Stn Provincial Gov.	Victoria	V8W 9J1
BE	Bermuda Weather Office	AFTN	Bldg. 1574, Southside	St. Davids	DD01
BVI	Dept. of Disaster Management	FAX	#3 Wailing Rd., Road Town	Tortola	VG1110
CA	WFO - Monterey	AWIPS	21 Grace Hopper Ave., Stop 5	Monterey	93943-5505
	FNMOC - Fleet Numeric, Navy/DMS Interface, Monterey	NOAAPORT	7 Grace Hopper Ave.	Monterey	93943-0027
	USCG - 11th District, Alameda, CA	NWW/NAWAS	Coast Guard Island	Alameda	94501-5100
	FEMA - Region IX	NAWAS	1111 Broadway, Suite 1200	Oakland	94607-4052
	SWP - California	NWW/NAWAS	3650 Schriever Ave.	Mather	95655
	USCG - CAMSPAC, Pt. Reyes, CA	NWW	17000 Sir Francis Drake Blvd.	Pt. Reyes Station	94956-0560
	WFO - San Diego	AWIPS	11440 W. Bernardo Court, Suite 230	San Diego	92127
	WFO - Oxnard	AWIPS	520 North Elevar St.	Oxnard	93030
	WFO - Eureka	AWIPS	300 Starfare Dr.	Eureka	95501
CO	National Earthquake Information Center - USGS	Phone	1711 Illinois St.	Golden	80401
CT	SWP - Connecticut	NWW/NAWAS	1111 Country Club Rd.	Middletown	06106-5042
DC	State Department - Emergency Operations Center	NAWAS/Email	2201 C St. NW	Washington	20520
	SWP - District of Columbia	NWW/NAWAS	2720 Martin Luther King Jr. Ave., SE, 2nd Floor	Washington	20032
DE	SWP - Delaware	NWW/NAWAS	165 Brick Store Landing Rd.	Smyrna	19977
FL	WFO - Melbourne	AWIPS	421 Croton Rd.	Melbourne	32935
	WFO - Key West	AWIPS	1315 White St.	Key West	33040
	WFO - Jacksonville	AWIPS	13701 Fang Dr.	Jacksonville	32218
	WFO - Tallahassee	AWIPS	Love Bldg, FL. St. University, 4th Fl.	Tallahassee	32306-4509
	WFO - Tampa	AWIPS	2525 14th Ave. S.E.	Ruskin	33570
	USCG - 7th District, Miami, FL	NWW/NAWAS	909 SE 1st Ave.	Miami	33131
	SWP - Florida	NWW/NAWAS	2555 Shumard Oak Blvd.	Tallahassee	32399-2100
	WFO - Miami	AWIPS	11691 SW 17th St.	Miami	33165
GA	SWP - Georgia	NWW/NAWAS	P.O. Box 18055	Atlanta	30316
	FEMA Alternate Ops Center	NAWAS	434 S. Pine Tree Blvd.	Thomasville	31792
HI	Pacific Tsunami Warning Center	All Systems	91-270 Fort Weaver Rd.	Ewa Beach	96706-2928
LA	SWP - Louisiana	NWW/NAWAS	7667 Independence Blvd.	Baton Rouge	70806
	WFO - New Orleans	AWIPS	62300 Airport Rd.	Slidell	70460-5243
	WFO - Lake Charles	AWIPS	500 Airport Blvd.	Lake Charles	70607
	USCG - 8th District, New Orleans, LA	NWW/NAWAS	500 Poydras St.	New Orleans	70130-3310
MA	SWP - Massachusetts	NWW/NAWAS	400 Worcester	Framingham	1702
	WFO - Taunton	AWIPS	445 Myles Stardish Blvd.	Taunton	2780

State	Agency	Primary Comms	Street	City	Zip
MD	SWP - Maryland	NWW/NAWAS	5401 Rue Saint Lo Dr.	Reisterstown	21136
	NGA - National Geospatial Intelligence Agency	Email	4600 Sangamore Rd.	Bethesda	20816
	CO-Ops' CORMS - National Ocean Survey	Email	1325 E. West Hwy, Rm 6390	Silver Spring	20910
	NWS - HQ - Metwatch Desk	Email	1326 E. West Hwy.	Silver Spring	20910
ME	WFO - Gray	AWIPS	1 Weather Lane, Route 231	Gray	04039
	WFO - Caribou	AWIPS	810 Main Street	Caribou	04736
	SWP - Maine	NWW/NAWAS	45 Commerce Dr.	Augusta	04333
MS	SWP - Mississippi	NWW/NAWAS	P.O. Box 5644	Pearl	39208
	DART Buoys - Data Management Analysis Center - NDBC	Email/Phone	Bldg. 1007	Stennis Space Center	39529
NC	SWP - North Carolina	NWW/NAWAS	4008 District Drive	Raleigh	27607
	WFO - Wilmington	AWIPS	2015 Gardner Dr.	Wilmington	28405
NH	SWP - New Hampshire	NWW/NAWAS	110 Smokey Bear Blvd.	Concord	03301
NJ	WFO - Mount Holly	AWIPS	732 Woodlane Rd.	Mount Holly	08060-9615
	SWP - New Jersey	NWW/NAWAS	P.O. Box 7068	Trenton	08628
NS	Atlantic Storm Prediction Centre - Nova Scotia	GTS/Email	45 Alderney Dr.	Dartmouth	B2Y 2N6
NY	WFO - Albany	AWIPS	251 Fuller Rd., Suite 8300	Albany	12203-3640
	SWP - New York	NWW/NAWAS	1220 Washington Ave., Suite 101, Bldg 22	Albany	12226-2251
ON	Govt of Canada - Ops Ctr Public Safety & Em Prep Canada	NAWAS	122 Banks St.	Ottawa	K1A 0W6
OR	WFO - Portland	AWIPS	5241 NE 122nd Ave.	Portland	97230-1089
	WFO - Medford	AWIPS	4003 Cirrus Dr.	Medford	97504-4198
	SWP - Oregon	NWW/NAWAS	3225 Sate St.	Salem	97309
PA	SWP - Pennsylvania	NWW/NAWAS	2605 Interstate Dr.	Harrisburg	17110-9364
	WFO - Pittsburg	AWIPS	192 Shafer Rd.	Moon Township	15108
PR	Puerto Rico Seismic Network	Email/Phone	Call Box 9000	Majaguez	00681-9000
	SWP - Puerto Rico	NWW/NAWAS	P.O. Box 9066597	San Juan	00906
	WFO - San Juan	AWIPS	4000 Carretera 190	Carolina	00979
RI	SWP - Rhode Island	NWW/NAWAS	311 Danielson Pike	North Scituate	02857
SC	SWO - South Carolina	NWW/NAWAS	2779 Fish Hatchery Rd.	West Columbia	29172
	WFO - Charleston	AWIPS	5777 S. Aviation Ave.	North Charleston	29406-6162
TX	WFO - Houston	AWIPS	1353 FM 646, Suite 202	Dickinson	77539
	WFO - Corpus Christi	AWIPS	300 Pinson Dr.	Corpus Christi	78406
	WFO - Brownsville	AWIPS	20 S. Vermillion Rd.	Brownsville	78521
	SWP - Texas	NWW/NAWAS	5805 N. Lamar Blvd.	Austin	78752
VA	USN - NAVLANTNETOC - Norfolk	AWIPS/Phone	9141 3rd Ave.	Norfolk	23511
	WFO - Wakefield	AWIPS	10009 General Mahone Hwy.	Wakefield	23888
	FEMA Ops Center - Berryville	NAWAS	19844 Blue Ridge Mountain Rd.	Berryville	22611
	USCG - CAMSLANT - Chesapeake	NWW	4720 Douglas Munro Rd.	Chesapeake	23322-2598
	SWP - Virginia	NWW/NAWAS	10501 Trade Court	Richamond	23236
VI	SWP - U.S. Virgin Islands	NWW/EMWIN	8221 Nisky	St. Thomas	00802
	SWP - U.S. Virgin Islands	NWW/EMWIN	18 Clifton Hill	St. Croix	00851
WA	SWP - Washington	NWW/NAWAS	WA Military Dept. Emergency Management Div., Bldg 20, MSTA-20	Camp Murray	98430-5112
	USCG - 13th District Seattle, WA	NWW/NAWAS	915 2nd Ave.	Seattle	98174-1067
	FEMA MERS Ops Center - Region 10 - Bothell	NAWAS	200 228th St. SW	Bothell	98021-8627
	WFO - Seattle	AWIPS	7600 Sand Point Way NE	Seattle	98115-6349

Section 7: Message Examples

7.1 Pacific AOR Tsunami Warning/Watch/Advisory (WEPA41)

WEPA41 PAAQ 272039
TSUWCA

BULLETIN
TEST...TSUNAMI MESSAGE NUMBER 1...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
139 PM PDT TUE JUL 27 2010

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
WEPA41 MESSAGE...

...A TEST TSUNAMI WARNING IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF CALIFORNIA AND OREGON FROM RAGGED POINT
CALIFORNIA/45 MILES NW OF SAN LUIS OBISPO/ TO CASCADE HEAD
OREGON/70 MILES SW OF PORTLAND/...

...A TEST TSUNAMI ADVISORY IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF CALIFORNIA FROM THE CALIFORNIA-MEXICO
BORDER TO RAGGED POINT CALIFORNIA/45 MILES NW OF SAN LUIS
OBISPO/...

...A TEST TSUNAMI ADVISORY IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF OREGON - WASHINGTON AND BRITISH COLUMBIA
FROM CASCADE HEAD OREGON/70 MILES SW OF PORTLAND/ TO THE
NORTH TIP OF VANCOUVER ISLAND BRITISH COLUMBIA...

...THIS MESSAGE IS INFORMATION ONLY FOR COASTAL AREAS OF
BRITISH COLUMBIA AND ALASKA FROM THE NORTH TIP OF VANCOUVER
ISLAND BRITISH COLUMBIA TO ATTU ALASKA...

RECOMMENDED ACTIONS

- PERSONS IN LOW-LYING COASTAL AREAS SHOULD BE ALERT TO
INSTRUCTIONS FROM THEIR LOCAL EMERGENCY OFFICIALS. EVACUATIONS
ARE ONLY ORDERED BY EMERGENCY RESPONSE AGENCIES.
- PERSONS IN TSUNAMI WARNING COASTAL AREAS SHOULD MOVE INLAND TO
HIGHER GROUND.
 - PERSONS IN TSUNAMI ADVISORY AREAS SHOULD MOVE OUT OF THE
WATER... OFF THE BEACH AND OUT OF HARBORS AND MARINAS.

PRELIMINARY EARTHQUAKE PARAMETERS

MAGNITUDE - 7.7
TIME - 1200 AKDT JUL 27 2010
1300 PDT JUL 27 2010
2000 UTC JUL 27 2010
LOCATION - 40.0 NORTH 124.5 WEST
55 MILES/89 KM SW OF EUREKA CALIFORNIA
190 MILES/306 KM NW OF SAN FRANCISCO CALIFORNIA
DEPTH - 9 MILES/15 KM

TSUNAMI WARNINGS MEAN THAT A TSUNAMI WITH SIGNIFICANT WIDESPREAD

INUNDATION IS IMMINENT OR EXPECTED. WARNINGS INDICATE THAT WIDESPREAD DANGEROUS COASTAL FLOODING ACCOMPANIED BY POWERFUL CURRENTS IS POSSIBLE AND MAY CONTINUE FOR SEVERAL HOURS AFTER THE INITIAL WAVE ARRIVAL.

TSUNAMI ADVISORIES MEAN THAT A TSUNAMI CAPABLE OF PRODUCING STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR THE WATER IS EXPECTED. SIGNIFICANT WIDESPREAD INUNDATION IS NOT EXPECTED FOR AREAS UNDER AN ADVISORY. CURRENTS MAY BE HAZARDOUS TO SWIMMERS... BOATS... AND COASTAL STRUCTURES AND MAY CONTINUE FOR SEVERAL HOURS AFTER THE INITIAL WAVE ARRIVAL.

PACIFIC COASTAL REGIONS OUTSIDE CALIFORNIA/ OREGON/ WASHINGTON/ BRITISH COLUMBIA AND ALASKA SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES FOR INFORMATION ON THIS EVENT AT WWW.PRH.NOAA.GOV/PR/PTWC.

THIS MESSAGE IS BASED MAINLY ON EARTHQUAKE DATA. EARTHQUAKES OF THIS SIZE OFTEN GENERATE DANGEROUS TSUNAMIS. AS MORE INFORMATION BECOMES AVAILABLE THE WARNING AND ADVISORY AREAS WILL BE REFINED.

THIS MESSAGE WILL BE UPDATED IN 30 MINUTES OR SOONER IF THE SITUATION WARRANTS. THE TSUNAMI MESSAGE WILL REMAIN IN EFFECT UNTIL FURTHER NOTICE. REFER TO THE INTERNET SITE WCATWC.ARH.NOAA.GOV FOR MORE INFORMATION.

PZZ530-CAZ529-530-006-505>509-002-001-ORZ021-022-002-272139-
/T.NEW.PAAQ.TS.W.0013.100727T2039Z-000000T0000Z/
COASTAL AREAS BETWEEN AND INCLUDING RAGGED POINT
CALIFORNIA/45 MILES NW OF SAN LUIS OBISPO/ TO CASCADE HEAD
OREGON/70 MILES SW OF PORTLAND/
139 PM PDT TUE JUL 27 2010

...A TEST TSUNAMI WARNING IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF CALIFORNIA AND OREGON FROM RAGGED POINT
CALIFORNIA/45 MILES NW OF SAN LUIS OBISPO/ TO CASCADE HEAD
OREGON/70 MILES SW OF PORTLAND/...

PERSONS IN TSUNAMI WARNING COASTAL AREAS SHOULD MOVE INLAND TO HIGHER GROUND.

TSUNAMI WARNINGS MEAN THAT A TSUNAMI WITH SIGNIFICANT WIDESPREAD INUNDATION IS IMMINENT OR EXPECTED. TSUNAMIS ARE A SERIES OF WAVES POTENTIALLY DANGEROUS SEVERAL HOURS AFTER INITIAL ARRIVAL TIME. ESTIMATED TIMES OF INITIAL WAVE ARRIVAL FOR SELECTED SITES IN THE WARNING ARE PROVIDED BELOW.

CRESCENT CITY-CA 1347 PDT JUL 27 SAN FRANCISCO-CA 1419 PDT JUL 27
CHARLESTON-OR 1405 PDT JUL 27
FOR ARRIVAL TIMES AT ADDITIONAL LOCATIONS SEE
WCATWC.ARH.NOAA.GOV

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CAZ042-043-040-041-087-039-034-035-272139-
/T.NEW.PAAQ.TS.Y.0013.100727T2039Z-000000T0000Z/
COASTAL AREAS BETWEEN AND INCLUDING THE CALIFORNIA-MEXICO

BORDER TO RAGGED POINT CALIFORNIA/45 MILES NW OF SAN LUIS
OBISPO/
139 PM PDT TUE JUL 27 2010

...A TEST TSUNAMI ADVISORY IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF CALIFORNIA FROM THE CALIFORNIA-MEXICO
BORDER TO RAGGED POINT CALIFORNIA/45 MILES NW OF SAN LUIS
OBISPO/...

PERSONS IN TSUNAMI ADVISORY AREAS SHOULD MOVE OUT OF THE
WATER... OFF THE BEACH AND OUT OF HARBORS AND MARINAS.

TSUNAMI ADVISORIES MEAN THAT A TSUNAMI CAPABLE OF PRODUCING
STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR
WATER IS IMMINENT OR EXPECTED. SIGNIFICANT WIDESPREAD INUNDATION
IS NOT EXPECTED FOR AREAS IN AN ADVISORY. TSUNAMIS ARE A SERIES OF
WAVES POTENTIALLY DANGEROUS SEVERAL HOURS AFTER INITIAL ARRIVAL
TIME. ESTIMATED TIMES OF INITIAL WAVE ARRIVAL FOR SELECTED
SITES IN THE ADVISORY ARE PROVIDED BELOW.

SANTA BARBARA-CA 1443 PDT JUL 27 LA JOLLA-CA 1513 PDT JUL 27
SAN PEDRO-CA 1459 PDT JUL 27
FOR ARRIVAL TIMES AT ADDITIONAL LOCATIONS SEE
WCATWC.ARH.NOAA.GOV

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ORZ001-WAZ001-021-510-514>517-503-272139-
/T.NEW.PAAQ.TS.Y.0013.100727T2039Z-000000T0000Z/
COASTAL AREAS BETWEEN AND INCLUDING CASCADE HEAD OREGON/70
MILES SW OF PORTLAND/ TO THE NORTH TIP OF VANCOUVER ISLAND
BRITISH COLUMBIA
139 PM PDT TUE JUL 27 2010

...A TEST TSUNAMI ADVISORY IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF OREGON - WASHINGTON AND BRITISH COLUMBIA
FROM CASCADE HEAD OREGON/70 MILES SW OF PORTLAND/ TO THE
NORTH TIP OF VANCOUVER ISLAND BRITISH COLUMBIA...

PERSONS IN TSUNAMI ADVISORY AREAS SHOULD MOVE OUT OF THE
WATER... OFF THE BEACH AND OUT OF HARBORS AND MARINAS.

TSUNAMI ADVISORIES MEAN THAT A TSUNAMI CAPABLE OF PRODUCING
STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR
WATER IS IMMINENT OR EXPECTED. SIGNIFICANT WIDESPREAD INUNDATION
IS NOT EXPECTED FOR AREAS IN AN ADVISORY. TSUNAMIS ARE A SERIES OF
WAVES POTENTIALLY DANGEROUS SEVERAL HOURS AFTER INITIAL ARRIVAL
TIME. ESTIMATED TIMES OF INITIAL WAVE ARRIVAL FOR SELECTED
SITES IN THE ADVISORY ARE PROVIDED BELOW.

SEASIDE-OR 1449 PDT JUL 27 NEAH BAY-WA 1510 PDT JUL 27
WESTPORT-WA 1500 PDT JUL 27 TOFINO-BC 1520 PDT JUL 27
FOR ARRIVAL TIMES AT ADDITIONAL LOCATIONS SEE
WCATWC.ARH.NOAA.GOV

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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7.2 Pacific AOR Tsunami Information Statement (WEPA43)

WEPA43 PAAQ 272103
TIBWCA

TEST...TSUNAMI INFORMATION STATEMENT NUMBER 1...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
103 PM AKDT TUE JUL 27 2010

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
WEPA43 MESSAGE...

...THIS TSUNAMI INFORMATION STATEMENT IS FOR ALASKA/ BRITISH
COLUMBIA/ WASHINGTON/ OREGON AND CALIFORNIA ONLY...

NO WARNING... NO WATCH AND NO ADVISORY IS IN EFFECT FOR
THE STATES AND PROVINCES PREVIOUSLY LISTED.

EVALUATION

BASED ON MAGNITUDE... LOCATION AND HISTORIC TSUNAMI RECORDS THE
EARTHQUAKE WAS NOT SUFFICIENT TO GENERATE A TSUNAMI DAMAGING TO
CALIFORNIA/ OREGON/ WASHINGTON/ BRITISH COLUMBIA OR ALASKA. SOME
OF THESE AREAS MAY EXPERIENCE NON-DAMAGING SEA LEVEL CHANGES. IN
COASTAL AREAS OF INTENSE SHAKING LOCALLY GENERATED TSUNAMIS CAN
BE TRIGGERED BY UNDERWATER LANDSLIDES.

PRELIMINARY EARTHQUAKE PARAMETERS

MAGNITUDE - 6.8
TIME - 1300 AKDT JUL 27 2010
1400 PDT JUL 27 2010
2100 UTC JUL 27 2010
LOCATION - 54.3 NORTH 160.8 WEST
70 MILES/113 KM S OF SAND POINT ALASKA
625 MILES/1006 KM SW OF ANCHORAGE ALASKA
DEPTH - 21 MILES/33 KM

PACIFIC COASTAL REGIONS OUTSIDE CALIFORNIA/ OREGON/ WASHINGTON/
BRITISH COLUMBIA AND ALASKA SHOULD REFER TO THE PACIFIC TSUNAMI
WARNING CENTER MESSAGES FOR INFORMATION ON THIS EVENT AT
WWW.PRH.NOAA.GOV/PR/PTWC.

THIS WILL BE THE ONLY STATEMENT ISSUED FOR THIS EVENT BY THE
WEST COAST/ALASKA TSUNAMI WARNING CENTER UNLESS ADDITIONAL
INFORMATION BECOMES AVAILABLE. REFER TO THE INTERNET SITE
WCATWC.ARH.NOAA.GOV FOR MORE INFORMATION.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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7.3 Alaska Information Statement (SEAK71)

SEAK71 PAAQ 272107
EQIAKX

TEST...TSUNAMI SEISMIC INFORMATION STATEMENT...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
107 PM AKDT TUE JUL 27 2010

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
SEAK71 MESSAGE...

...THIS IS AN INFORMATION STATEMENT...

EVALUATION

AN EARTHQUAKE HAS OCCURRED WITH A LOCATION AND MAGNITUDE SUCH
THAT A TSUNAMI WILL NOT BE GENERATED. THIS WILL BE THE ONLY
WCATWC MESSAGE ISSUED FOR THIS EVENT.

PRELIMINARY EARTHQUAKE PARAMETERS

MAGNITUDE - 5.2
TIME - 1305 AKDT JUL 27 2010
1405 PDT JUL 27 2010
2105 UTC JUL 27 2010
LOCATION - 60.1 NORTH 143.8 WEST
50 MILES/80 KM W OF CAPE YAKATAGA ALASKA
220 MILES/354 KM SE OF ANCHORAGE ALASKA
DEPTH - 21 MILES/33 KM

THE LOCATION AND MAGNITUDE ARE BASED ON PRELIMINARY INFORMATION.
FURTHER INFORMATION WILL BE ISSUED BY THE UNITED STATES
GEOLOGICAL SURVEY - EARTHQUAKE.USGS.GOV - OR THE APPROPRIATE
REGIONAL SEISMIC NETWORK.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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7.4 U.S. West Coast Information Statement (SEUS71)

SEUS71 PAAQ 272109
EQIWOC

TEST...TSUNAMI SEISMIC INFORMATION STATEMENT...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
209 PM PDT TUE JUL 27 2010

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
SEUS71 MESSAGE...

...THIS IS AN INFORMATION STATEMENT...

EVALUATION

AN EARTHQUAKE HAS OCCURRED WITH A MAGNITUDE SUCH THAT A TSUNAMI
IS NOT EXPECTED. IN COASTAL AREAS OF INTENSE SHAKING LOCALLY
GENERATED TSUNAMIS CAN BE TRIGGERED BY UNDERWATER LANDSLIDES.
THIS WILL BE THE ONLY WCATWC MESSAGE ISSUED FOR THIS EVENT.

PRELIMINARY EARTHQUAKE PARAMETERS

MAGNITUDE - 5.9
TIME - 1307 AKDT JUL 27 2010
1407 PDT JUL 27 2010
2107 UTC JUL 27 2010
LOCATION - 36.0 NORTH 122.2 WEST
45 MILES/72 KM SW OF MONTEREY CALIFORNIA
125 MILES/201 KM S OF SAN FRANCISCO CALIFORNIA
DEPTH - 21 MILES/33 KM

THE LOCATION AND MAGNITUDE ARE BASED ON PRELIMINARY INFORMATION.
FURTHER INFORMATION WILL BE ISSUED BY THE UNITED STATES
GEOLOGICAL SURVEY - EARTHQUAKE.USGS.GOV - OR THE APPROPRIATE
REGIONAL SEISMIC NETWORK.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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7.5 Atlantic AOR Tsunami Warning/Watch (WEXX20)

WEXX20 PAAQ 272117
TSUAT1

BULLETIN

TEST...TSUNAMI MESSAGE NUMBER 2...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
517 PM AST TUE JUL 27 2010

UPDATES IN THIS MESSAGES INCLUDE AN EXPANDED ADVISORY
REGION AND AN OBSERVED TSUNAMI IN PUERTO RICO.

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
WEXX20 MESSAGE...

...THE TEST TSUNAMI WARNING CONTINUES IN EFFECT FOR PUERTO RICO
AND THE VIRGIN ISLANDS...

...A TEST TSUNAMI ADVISORY IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA
- MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT
- RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE -
NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM SOUTH
SANTEE RIVER SOUTH CAROLINA TO BOAT HARBOUR NEWFOUNDLAND...

...THIS TEST MESSAGE IS INFORMATION ONLY FOR COASTAL AREAS OF
TEXAS - LOUISIANA - MISSISSIPPI - ALABAMA - FLORIDA -
GEORGIA AND SOUTH CAROLINA FROM BROWNSVILLE TEXAS TO SOUTH
SANTEE RIVER SOUTH CAROLINA...

...THIS TEST MESSAGE IS INFORMATION ONLY FOR COASTAL AREAS OF
NEWFOUNDLAND AND LABRADOR FROM BOAT HARBOUR NEWFOUNDLAND TO
CAPE CHIDLEY LABRADOR...

RECOMMENDED ACTIONS

- A TSUNAMI HAS BEEN GENERATED WHICH IS EXPECTED TO CAUSE DAMAGE
TO THE WARNING AND/OR ADVISORY REGIONS LISTED IN THE HEADLINE.
PERSONS IN LOW-LYING COASTAL AREAS SHOULD BE ALERT TO
INSTRUCTIONS FROM THEIR LOCAL EMERGENCY OFFICIALS. EVACUATIONS
ARE ONLY ORDERED BY EMERGENCY RESPONSE AGENCIES.
- PERSONS IN TSUNAMI WARNING COASTAL AREAS SHOULD MOVE INLAND TO
HIGHER GROUND.
 - PERSONS IN TSUNAMI ADVISORY AREAS SHOULD MOVE OUT OF THE
WATER... OFF THE BEACH AND OUT OF HARBORS AND MARINAS.

MEASUREMENTS OR REPORTS OF TSUNAMI ACTIVITY

LOCATION	LAT	LON	TIME	AMPL
SAN JUAN - PR	18.5N	66.1W	1145UTC	6.6FT/2.0M

TIME - TIME OF MEASUREMENT

AMPL - TSUNAMI AMPLITUDES ARE MEASURED RELATIVE TO NORMAL SEA LEVEL.
IT IS ...NOT... CREST-TO-TROUGH WAVE HEIGHT.

VALUES ARE GIVEN IN BOTH METERS (M) AND FEET (FT) .

PRELIMINARY EARTHQUAKE PARAMETERS

MAGNITUDE - 7.6
TIME - 1710 EDT JUL 27 2010
1710 AST JUL 27 2010
1610 CDT JUL 27 2010
2110 UTC JUL 27 2010
LOCATION - 18.5 NORTH 66.8 WEST
30 MILES/48 KM NE OF MAYAGUEZ PUERTO RICO
45 MILES/72 KM W OF SAN JUAN PUERTO RICO
DEPTH - 21 MILES/33 KM

TSUNAMI WARNINGS MEAN THAT A TSUNAMI WITH SIGNIFICANT WIDESPREAD INUNDATION IS IMMINENT OR EXPECTED. WARNINGS INDICATE THAT WIDESPREAD DANGEROUS COASTAL FLOODING ACCOMPANIED BY POWERFUL CURRENTS IS POSSIBLE AND MAY CONTINUE FOR SEVERAL HOURS AFTER THE INITIAL WAVE ARRIVAL.

TSUNAMI ADVISORIES MEAN THAT A TSUNAMI CAPABLE OF PRODUCING STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR THE WATER IS EXPECTED. SIGNIFICANT WIDESPREAD INUNDATION IS NOT EXPECTED FOR AREAS UNDER AN ADVISORY. CURRENTS MAY BE HAZARDOUS TO SWIMMERS... BOATS... AND COASTAL STRUCTURES AND MAY CONTINUE FOR SEVERAL HOURS AFTER THE INITIAL WAVE ARRIVAL.

CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO AND THE VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES FOR INFORMATION ON THIS EVENT AT WWW.PRH.NOAA.GOV/PR/PTWC.

THIS MESSAGE IS BASED ON EARTHQUAKE DATA... OBSERVED TSUNAMI AMPLITUDES... HISTORICAL INFORMATION AND FORECAST MODELS.

THIS MESSAGE WILL BE UPDATED IN 30 MINUTES OR SOONER IF THE SITUATION WARRANTS. THE TSUNAMI MESSAGE WILL REMAIN IN EFFECT UNTIL FURTHER NOTICE. REFER TO THE INTERNET SITE WCATWC.ARH.NOAA.GOV FOR MORE INFORMATION.

AMZ712-715-725-735-742-745-PRZ001>003-005-007-008-010-011-
VIZ001-002-272217-
/T.CON.PAAQ.TS.W.0014.000000T0000Z-000000T0000Z/
COASTAL AREAS OF PUERTO RICO AND THE VIRGIN ISLANDS.
517 PM AST TUE JUL 27 2010

...THE TEST TSUNAMI WARNING CONTINUES IN EFFECT FOR PUERTO RICO AND THE VIRGIN ISLANDS...

PERSONS IN TSUNAMI WARNING COASTAL AREAS SHOULD MOVE INLAND TO HIGHER GROUND.

TSUNAMI WARNINGS MEAN THAT A TSUNAMI WITH SIGNIFICANT WIDESPREAD INUNDATION IS IMMINENT OR EXPECTED. TSUNAMIS ARE A SERIES OF WAVES POTENTIALLY DANGEROUS SEVERAL HOURS AFTER INITIAL ARRIVAL TIME. ESTIMATED TIMES OF INITIAL WAVE ARRIVAL FOR SELECTED SITES IN THE WARNING ARE PROVIDED BELOW.

SAN JUAN-PR 1724 AST JUL 27 CHRISTIANSTED-VI 1754 AST JUL 27

MAYAGUEZ-PR 1735 AST JUL 27 CHARLOT AMALI-VI 1807 AST JUL 27
FOR ARRIVAL TIMES AT ADDITIONAL LOCATIONS SEE
WCATWC.ARH.NOAA.GOV

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AMZ250-252-254-256-130-135-150-152-154-156-158-ANZ631>633-
656-658-650-652-654-430-431-450>455-330-335-338-340-345-350-
353-355-230>237-250-254-255-256-150-050>052-081-SCZ034-046-
NCZ097-100-101-045>047-080-081-094-095-098-103-104-015>017-
030>032-102-VAZ084-086-091-094-095-098-099-100-MDZ025-DEZ002>004-
NJZ005-006-011>014-021-023>026-NYZ071>081-CTZ009>012-RIZ002-
004>008-MAZ007-016-019>024-NHZ014-MEZ022>028-029-030-272217-
/T.NEW.PAAQ.TS.Y.0014.100727T2117Z-000000T0000Z/
COASTAL AREAS BETWEEN AND INCLUDING SOUTH SANTEE RIVER
SOUTH CAROLINA TO BOAT HARBOUR NEWFOUNDLAND
517 PM AST TUE JUL 27 2010

...A TEST TSUNAMI ADVISORY IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA
- MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT
- RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE -
NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM SOUTH
SANTEE RIVER SOUTH CAROLINA TO BOAT HARBOUR NEWFOUNDLAND...

PERSONS IN TSUNAMI ADVISORY AREAS SHOULD MOVE OUT OF THE
WATER... OFF THE BEACH AND OUT OF HARBORS AND MARINAS.

TSUNAMI ADVISORIES MEAN THAT A TSUNAMI CAPABLE OF PRODUCING
STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR
WATER IS IMMINENT OR EXPECTED. SIGNIFICANT WIDESPREAD INUNDATION
IS NOT EXPECTED FOR AREAS IN AN ADVISORY. TSUNAMIS ARE A SERIES OF
WAVES POTENTIALLY DANGEROUS SEVERAL HOURS AFTER INITIAL ARRIVAL
TIME. ESTIMATED TIMES OF INITIAL WAVE ARRIVAL FOR SELECTED
SITES IN THE ADVISORY ARE PROVIDED BELOW.

CAPE HATTERAS-NC	2018	EDT	JUL 27	SCATARIE IS-NS	2340	ADT	JUL 27
LOCKEPORT-NS	2244	ADT	JUL 27	ST LAWRENCE-NL	0012	NDT	JUL 28
MONTAUK-NY	2150	EDT	JUL 27	GRAND MANAN-NB	2357	ADT	JUL 27
VIRGINIA BCH-VA	2152	EDT	JUL 27	MANHATTAN-NY	2315	EDT	JUL 27
ATLANTIC CITY-NJ	2159	EDT	JUL 27	PORTLAND-ME	2331	EDT	JUL 27
MYRTLE BCH-SC	2213	EDT	JUL 27	BOSTON-MA	2348	EDT	JUL 27
NANTUCKET IS-MA	2226	EDT	JUL 27	BONAVISTA-NL	0153	NDT	JUL 28

FOR ARRIVAL TIMES AT ADDITIONAL LOCATIONS SEE
WCATWC.ARH.NOAA.GOV

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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7.6 Atlantic AOR Tsunami Information Statement (WEXX22)

WEXX22 PAAQ 272137
TIBAT1

TEST...TSUNAMI INFORMATION STATEMENT NUMBER 1...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
537 PM EDT TUE JUL 27 2010

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
WEXX22 MESSAGE...

...THIS TSUNAMI INFORMATION STATEMENT IS FOR PUERTO RICO/
THE VIRGIN ISLANDS/ THE U.S. ATLANTIC AND GULF OF
MEXICO STATES/ AND EASTERN CANADIAN PROVINCES...

NO WARNING... NO WATCH AND NO ADVISORY IS IN EFFECT FOR
THESE AREAS.

EVALUATION

BASED ON EARTHQUAKE DATA AND HISTORIC TSUNAMI RECORDS THE
EARTHQUAKE WAS NOT SUFFICIENT TO GENERATE A TSUNAMI DAMAGING TO
PUERTO RICO/ THE VIRGIN ISLANDS/ THE U.S. ATLANTIC AND GULF
OF MEXICO COASTS/ AND EASTERN CANADA.

HOWEVER - EARTHQUAKES OF THIS SIZE SOMETIMES GENERATE
TSUNAMIS THAT CAN BE DESTRUCTIVE ALONG COASTS LOCATED IN THE
REGION OF THE EARTHQUAKE EPICENTER. AUTHORITIES IN THE REGION
SHOULD BE AWARE OF THIS POSSIBILITY AND TAKE APPROPRIATE ACTION.

PRELIMINARY EARTHQUAKE PARAMETERS

MAGNITUDE - 6.9
TIME - 1730 EDT JUL 27 2010
1630 CDT JUL 27 2010
1730 AST JUL 27 2010
2130 UTC JUL 27 2010
LOCATION - 39.0 NORTH 13.3 WEST
- NORTH ATLANTIC OCEAN
DEPTH - 16 MILES/25 KM

CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO AND THE VIRGIN
ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES
FOR INFORMATION ON THIS EVENT AT WWW.PRH.NOAA.GOV/PR/PTWC.

THIS WILL BE THE ONLY STATEMENT ISSUED FOR THIS EVENT BY THE
WEST COAST/ALASKA TSUNAMI WARNING CENTER UNLESS ADDITIONAL
INFORMATION BECOMES AVAILABLE. REFER TO THE INTERNET SITE
WCATWC.ARH.NOAA.GOV FOR MORE INFORMATION.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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7.7 Atlantic Information Statement (SEXX60)

SEXX60 PAAQ 272140
EQIAT1

TEST...TSUNAMI SEISMIC INFORMATION STATEMENT...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
540 PM EDT TUE JUL 27 2010

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
SEXX60 MESSAGE...

...THIS IS AN INFORMATION STATEMENT...

EVALUATION

AN EARTHQUAKE HAS OCCURRED WITH A MAGNITUDE SUCH THAT A TSUNAMI
IS NOT EXPECTED. IN COASTAL AREAS OF INTENSE SHAKING LOCALLY
GENERATED TSUNAMIS CAN BE TRIGGERED BY UNDERWATER LANDSLIDES.
THIS WILL BE THE ONLY WCATWC MESSAGE ISSUED FOR THIS EVENT.

PRELIMINARY EARTHQUAKE PARAMETERS

MAGNITUDE - 5.6
TIME - 1735 EDT JUL 27 2010
1635 CDT JUL 27 2010
1735 AST JUL 27 2010
2135 UTC JUL 27 2010
LOCATION - 40.4 NORTH 74.7 WEST
45 MILES/72 KM SE OF ALLENTOWN PENNSYLVANIA
40 MILES/64 KM NE OF PHILADELPHIA PENNSYLVANIA
DEPTH - 7 MILES/12 KM

THE LOCATION AND MAGNITUDE ARE BASED ON PRELIMINARY INFORMATION.
FURTHER INFORMATION WILL BE ISSUED BY THE UNITED STATES
GEOLOGICAL SURVEY - EARTHQUAKE.USGS.GOV - OR THE APPROPRIATE
REGIONAL SEISMIC NETWORK.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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7.8 Pacific AOR Public Tsunami Warning/Watch/Advisory (WEAK51)

WEAK51 PAAQ 272143
TSUAK1

BULLETIN

TEST...PUBLIC TSUNAMI MESSAGE NUMBER 1...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
143 PM AKDT TUE JUL 27 2010

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
WEAK51 MESSAGE...

...A TEST TSUNAMI WARNING IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF ALASKA FROM CHIGNIK BAY ALASKA TO ATTU
ALASKA...

...A TEST TSUNAMI WATCH IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF CALIFORNIA - OREGON - WASHINGTON - BRITISH
COLUMBIA AND ALASKA FROM THE CALIFORNIA-MEXICO BORDER TO
CHIGNIK BAY ALASKA...

A TSUNAMI WARNING MEANS... ALL COASTAL RESIDENTS IN THE WARNING
AREA WHO ARE NEAR THE BEACH OR IN LOW-LYING REGIONS SHOULD MOVE
IMMEDIATELY INLAND TO HIGHER GROUND AND AWAY FROM ALL HARBORS AND
INLETS INCLUDING THOSE SHELTERED DIRECTLY FROM THE SEA. THOSE
FEELING THE EARTH SHAKE... SEEING UNUSUAL WAVE ACTION... OR THE
WATER LEVEL RISING OR RECEDING MAY HAVE ONLY A FEW MINUTES BEFORE
THE TSUNAMI ARRIVAL AND SHOULD MOVE IMMEDIATELY. HOMES AND
SMALL BUILDINGS ARE NOT DESIGNED TO WITHSTAND TSUNAMI IMPACTS.
DO NOT STAY IN THESE STRUCTURES.

ALL RESIDENTS WITHIN THE WARNED AREA SHOULD BE ALERT FOR
INSTRUCTIONS BROADCAST FROM THEIR LOCAL CIVIL AUTHORITIES. THIS
TSUNAMI WARNING IS BASED SOLELY ON EARTHQUAKE INFORMATION - THE
TSUNAMI HAS NOT YET BEEN CONFIRMED.

A TSUNAMI WATCH MEANS... ALL COASTAL RESIDENTS IN THE WATCH AREA
SHOULD PREPARE FOR POSSIBLE EVACUATION. A TSUNAMI WATCH IS ISSUED
TO AREAS WHICH WILL NOT BE IMMEDIATELY IMPACTED BY THE TSUNAMI.
WATCH AREAS WILL EITHER BE UPGRADED TO WARNING OR ADVISORY STATUS
OR CANCELED.

AT 140 PM ALASKAN DAYLIGHT TIME ON JULY 27 AN EARTHQUAKE WITH
PRELIMINARY MAGNITUDE 7.9 OCCURRED 90 MILES/145 KM NORTHWEST OF
ADAK ALASKA.

THIS EARTHQUAKE MAY HAVE GENERATED A TSUNAMI.

IF A TSUNAMI HAS BEEN GENERATED THE WAVES WILL FIRST REACH
ADAK ALASKA AT 210 PM AKDT ON JULY 27.

ESTIMATED TSUNAMI ARRIVAL TIMES AND MAPS ALONG WITH SAFETY RULES
AND OTHER INFORMATION CAN BE FOUND ON THE WEB SITE
WCATWC.ARH.NOAA.GOV.

TSUNAMIS CAN BE DANGEROUS WAVES THAT ARE NOT SURVIVABLE. WAVE
HEIGHTS ARE AMPLIFIED BY IRREGULAR SHORELINE AND ARE DIFFICULT TO
FORECAST. TSUNAMIS OFTEN APPEAR AS A STRONG SURGE AND MAY BE

PRECEDED BY A RECEDING WATER LEVEL. MARINERS IN WATER DEEPER THAN 600 FEET SHOULD NOT BE AFFECTED BY A TSUNAMI. WAVE HEIGHTS WILL INCREASE RAPIDLY AS WATER SHALLOWS. TSUNAMIS ARE A SERIES OF OCEAN WAVES WHICH CAN BE DANGEROUS FOR SEVERAL HOURS AFTER THE INITIAL WAVE ARRIVAL. DO NOT RETURN TO EVACUATED AREAS UNTIL AN ALL CLEAR IS GIVEN BY LOCAL CIVIL AUTHORITIES.

PACIFIC COASTAL REGIONS OUTSIDE CALIFORNIA/ OREGON/ WASHINGTON/ BRITISH COLUMBIA AND ALASKA SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES FOR INFORMATION ON THIS EVENT AT WWW.PRH.NOAA.GOV/PR/PTWC.

THIS MESSAGE WILL BE UPDATED IN 30 MINUTES OR SOONER IF THE SITUATION WARRANTS. THE TSUNAMI MESSAGE WILL REMAIN IN EFFECT UNTIL FURTHER NOTICE. FOR FURTHER INFORMATION STAY TUNED TO NOAA WEATHER RADIO... YOUR LOCAL TV OR RADIO STATIONS... OR SEE THE WEB SITE WCATWC.ARH.NOAA.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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7.9 Pacific AOR Public Tsunami Information Statement (WEAK53)

WEAK53 PAAQ 272146
TIBAK1

TEST...PUBLIC TSUNAMI INFORMATION STATEMENT NUMBER 1...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
246 PM PDT TUE JUL 27 2010

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
WEAK53 MESSAGE...

...A STRONG EARTHQUAKE HAS OCCURRED BUT A TSUNAMI IS NOT
EXPECTED ALONG THE CALIFORNIA/ OREGON/ WASHINGTON/
BRITISH COLUMBIA OR ALASKA COASTS...

NO WARNING... NO WATCH AND NO ADVISORY IS IN EFFECT FOR
THESE AREAS.

BASED ON THE EARTHQUAKE MAGNITUDE... LOCATION AND HISTORIC
TSUNAMI RECORDS A DAMAGING TSUNAMI IS NOT EXPECTED ALONG
THE CALIFORNIA/ OREGON/ WASHINGTON/ BRITISH COLUMBIA AND ALASKA
COASTS. AT COASTAL LOCATIONS WHICH HAVE EXPERIENCED
STRONG GROUND SHAKING LOCAL TSUNAMIS ARE POSSIBLE DUE
TO UNDERWATER LANDSLIDES.

AT 245 PM PACIFIC DAYLIGHT TIME ON JULY 27 AN EARTHQUAKE WITH
PRELIMINARY MAGNITUDE 6.9 OCCURRED
SOUTH OF THE FIJI ISLANDS.

PACIFIC COASTAL REGIONS OUTSIDE CALIFORNIA/ OREGON/ WASHINGTON/
BRITISH COLUMBIA AND ALASKA SHOULD REFER TO THE PACIFIC TSUNAMI
WARNING CENTER MESSAGES FOR INFORMATION ON THIS EVENT AT
WWW.PRH.NOAA.GOV/PR/PTWC.

THIS WILL BE THE ONLY STATEMENT ISSUED FOR THIS EVENT BY THE
WEST COAST/ALASKA TSUNAMI WARNING CENTER UNLESS ADDITIONAL
INFORMATION BECOMES AVAILABLE. SEE THE WEB SITE WCATWC.ARH.NOAA.GOV
FOR BASIC TSUNAMI INFORMATION - SAFETY RULES AND TSUNAMI TRAVEL
TIMES.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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7.10 Atlantic AOR Public Tsunami Warning/Watch/Advisory (WEXX30)

WEXX30 PAAQ 272149
TSUATE

BULLETIN

TEST...PUBLIC TSUNAMI MESSAGE NUMBER 1...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
549 PM EDT TUE JUL 27 2010

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
WEXX30 MESSAGE...

...A TEST TSUNAMI WARNING IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF NOVA SCOTIA AND NEWFOUNDLAND FROM
CHEZZETCOOK NOVA SCOTIA TO BOAT HARBOUR NEWFOUNDLAND...

...A TEST TSUNAMI ADVISORY IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF MAINE - NEW BRUNSWICK AND NOVA SCOTIA FROM
STONINGTON MAINE TO CHEZZETCOOK NOVA SCOTIA...

...A TEST TSUNAMI ADVISORY IS NOW IN EFFECT WHICH INCLUDES THE
COASTAL AREAS OF NEWFOUNDLAND AND LABRADOR FROM BOAT
HARBOUR NEWFOUNDLAND TO CAPE CHIDLEY LABRADOR...

...THIS MESSAGE IS INFORMATION ONLY FOR COASTAL AREAS OF
TEXAS - LOUISIANA - MISSISSIPPI - ALABAMA - FLORIDA -
GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA -
MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT -
RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE AND MAINE FROM
BROWNSVILLE TEXAS TO STONINGTON MAINE...

...THIS MESSAGE IS INFORMATION ONLY FOR COASTAL AREAS OF
PUERTO RICO AND THE VIRGIN ISLANDS...

A TSUNAMI WARNING MEANS... ALL COASTAL RESIDENTS IN THE WARNING
AREA WHO ARE NEAR THE BEACH OR IN LOW-LYING REGIONS SHOULD MOVE
IMMEDIATELY INLAND TO HIGHER GROUND AND AWAY FROM ALL HARBORS AND
INLETS INCLUDING THOSE SHELTERED DIRECTLY FROM THE SEA. THOSE
FEELING THE EARTH SHAKE... SEEING UNUSUAL WAVE ACTION... OR THE
WATER LEVEL RISING OR RECEDING MAY HAVE ONLY A FEW MINUTES BEFORE
THE TSUNAMI ARRIVAL AND SHOULD MOVE IMMEDIATELY. HOMES AND
SMALL BUILDINGS ARE NOT DESIGNED TO WITHSTAND TSUNAMI IMPACTS.
DO NOT STAY IN THESE STRUCTURES.

ALL RESIDENTS WITHIN THE WARNED AREA SHOULD BE ALERT FOR
INSTRUCTIONS BROADCAST FROM THEIR LOCAL CIVIL AUTHORITIES. THIS
TSUNAMI WARNING IS BASED SOLELY ON EARTHQUAKE INFORMATION - THE
TSUNAMI HAS NOT YET BEEN CONFIRMED.

A TSUNAMI ADVISORY MEANS THAT A TSUNAMI CAPABLE OF PRODUCING
STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR
THE WATER IS EXPECTED. SIGNIFICANT WIDESPREAD INUNDATION
IS NOT EXPECTED FOR AREAS UNDER AN ADVISORY. CURRENTS
MAY BE HAZARDOUS TO SWIMMERS... BOATS... AND COASTAL
STRUCTURES AND MAY CONTINUE FOR SEVERAL HOURS AFTER THE

INITIAL WAVE ARRIVAL.

AT 547 PM EASTERN DAYLIGHT TIME ON JULY 27 AN EARTHQUAKE WITH PRELIMINARY MAGNITUDE 7.6 OCCURRED IN THE NORTH ATLANTIC OCEAN. THIS EARTHQUAKE MAY HAVE GENERATED A TSUNAMI. IF A TSUNAMI HAS BEEN GENERATED THE WAVES WILL FIRST REACH ST LAWRENCE NEWFOUNDLAND AT 906 PM NDT ON JULY 27. ESTIMATED TSUNAMI ARRIVAL TIMES AND MAPS ALONG WITH SAFETY RULES AND OTHER INFORMATION CAN BE FOUND ON THE WEB SITE WCATWC.ARH.NOAA.GOV.

TSUNAMIS CAN BE DANGEROUS WAVES THAT ARE NOT SURVIVABLE. WAVE HEIGHTS ARE AMPLIFIED BY IRREGULAR SHORELINE AND ARE DIFFICULT TO FORECAST. TSUNAMIS OFTEN APPEAR AS A STRONG SURGE AND MAY BE PRECEDED BY A RECEDING WATER LEVEL. MARINERS IN WATER DEEPER THAN 600 FEET SHOULD NOT BE AFFECTED BY A TSUNAMI. WAVE HEIGHTS WILL INCREASE RAPIDLY AS WATER SHALLOWS. TSUNAMIS ARE A SERIES OF OCEAN WAVES WHICH CAN BE DANGEROUS FOR SEVERAL HOURS AFTER THE INITIAL WAVE ARRIVAL. DO NOT RETURN TO EVACUATED AREAS UNTIL AN ALL CLEAR IS GIVEN BY LOCAL CIVIL AUTHORITIES.

CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO AND THE VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES FOR INFORMATION ON THIS EVENT AT WWW.PRH.NOAA.GOV/PR/PTWC.

THIS MESSAGE WILL BE UPDATED IN 30 MINUTES OR SOONER IF THE SITUATION WARRANTS. THE TSUNAMI MESSAGE WILL REMAIN IN EFFECT UNTIL FURTHER NOTICE. FOR FURTHER INFORMATION STAY TUNED TO NOAA WEATHER RADIO... YOUR LOCAL TV OR RADIO STATIONS... OR SEE THE WEB SITE WCATWC.ARH.NOAA.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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7.11 Atlantic AOR Public Tsunami Information Statement (WEXX32)

WEXX32 PAAQ 272155
TIBATE

TEST...PUBLIC TSUNAMI INFORMATION STATEMENT NUMBER 1...TEST
NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK
555 PM EDT TUE JUL 27 2010

...THIS MESSAGE IS FOR TEST PURPOSES TO SHOW AN EXAMPLE
WEXX32 MESSAGE...

...A STRONG EARTHQUAKE HAS OCCURRED BUT A TSUNAMI IS NOT
EXPECTED ALONG THE COASTS OF PUERTO RICO/ THE VIRGIN
ISLANDS/ U.S. ATLANTIC AND GULF OF MEXICO STATES/ AND EASTERN
CANADIAN PROVINCES...

NO WARNING... NO WATCH AND NO ADVISORY IS IN EFFECT FOR
THESE AREAS.

BASED ON THE EARTHQUAKE LOCATION NEAR THE MID-ATLANTIC RIDGE A
TSUNAMI IS NOT EXPECTED ALONG THE PUERTO RICO/
VIRGIN ISLANDS/ U.S. ATLANTIC/ EASTERN CANADIAN AND GULF OF
MEXICO COASTS. EARTHQUAKES IN THIS REGION HAVE NOT HISTORICALLY
GENERATED TSUNAMIS.

AT 550 PM EASTERN DAYLIGHT TIME ON JULY 27 AN EARTHQUAKE WITH
PRELIMINARY MAGNITUDE 7.8 OCCURRED
NEAR THE NORTHERN MID-ATLANTIC RIDGE.

CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO AND THE VIRGIN
ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES
FOR INFORMATION ON THIS EVENT AT WWW.PRH.NOAA.GOV/PR/PTWC.

THIS WILL BE THE ONLY STATEMENT ISSUED FOR THIS EVENT BY THE
WEST COAST/ALASKA TSUNAMI WARNING CENTER UNLESS ADDITIONAL
INFORMATION BECOMES AVAILABLE. SEE THE WEB SITE WCATWC.ARH.NOAA.GOV
FOR BASIC TSUNAMI INFORMATION - SAFETY RULES AND TSUNAMI TRAVEL
TIMES.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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